

baseline effluent guidelines, CAFOs must perform a technical analysis that includes a prediction of the volume of overflows from the storage system. If the technical analysis were to be performed using climate data from a period of unusually high precipitation, then the CAFO's analysis would tend to overestimate the overflow volume and result in alternative performance standards that do not achieve pollutant reductions equal to the baseline effluent guidelines. Conversely, if the technical analysis were to be performed using climate data from a period of unusually low precipitation (e.g., drought periods), then the CAFO's analysis would tend to underestimate the overflow volume. By requiring the CAFO to use precipitation data for a 25-year period, the technical analysis will minimize the bias introduced by short-term variations in climate patterns.

The site-specific or other appropriate pollutant characterization data for the wastewater from the waste storage system (i.e., the overflow) would be coupled with the overflow volume output from the model described above to predict the quantity of pollutant discharge that would occur from a system designed to comply with the baseline effluent guidelines. CAFOs would be required to meet NPDES permit conditions that result in equivalent or improved pollutant reductions, as compared to the predicted quantity of pollutant discharge from overflow of the baseline system. If a CAFO elected to use this approach, it would be meeting the same limitations as a CAFO under the baseline effluent guidelines, but expressed in a different fashion (e.g., numeric limits on a continuous discharge versus a limit of zero discharge with an allowance for discontinuous overflows). To illustrate this type of analysis, EPA prepared an example evaluation using model farm characteristics. This example is available in the *Technical Development Document* and in section 19.6.2 of the rulemaking record.

(3) *Voluntary superior environmental performance standards for new Large swine/poultry/veal CAFOs.* The NSPS requirements that apply to production area discharges at new Large swine, poultry, and veal CAFOs are more stringent than the NSPS established for other new sources and the BAT requirements for existing sources. EPA is endeavoring to ensure that this rule does not inadvertently discourage approaches that are superior from a multimedia environmental perspective. Therefore, for new sources subject to Subpart D (Large swine, poultry, and

veal CAFOs), EPA is establishing alternative performance standards that provide additional compliance flexibilities specifically designed to encourage CAFOs to adopt innovative technologies for managing and/or treating manure, litter, and process wastewater. Specifically, the NSPS includes a provision that allows for the CAFO to request the Director to establish alternative NPDES permit limitations based upon a demonstration that site-specific innovative technologies will achieve overall environmental performance across all media which is equal to or superior to the reductions achieved by baseline standards. The quantity of pollutants discharged from the production area must be accompanied by an equivalent or greater reduction in the quantity of pollutants released to other media from the production area (e.g., air emissions from housing and storage), the land application areas for all manure, litter, and process wastewater at on-site and off-site locations, or both. In making the demonstration that the innovative technologies will achieve an equivalent or greater reduction, the comparison of quantity of pollutants is to be made on a mass basis where appropriate.

In general, EPA expects CAFOs will conduct a whole-farm audit to evaluate releases that occur at the point of generation to minimize or eliminate waste production and air emissions, followed by an evaluation of the waste handling and management systems, and ending with an evaluation of land application and off-site transfer operations. The specific technologies that CAFOs will select and adopt to achieve the pollutant reductions are expected to be most effective for the particular operation. As part of the demonstration the CAFO will need to present information that describes how the innovative technologies will generate improvement across multiple environmental media. The Director has the discretion to request additional supporting information to supplement such a request where necessary. Such information could include criteria and data that demonstrate effective performance of the technologies and that could be used to establish the alternative NPDES permit limitations.

(4) *Process and incentives for participating in alternative performance standards.* CAFOs interested in pursuing the alternative performance standards should have a good compliance history, e.g., no ongoing violations of existing permit performance standards or history of significant noncompliance. These facilities must conduct an analysis of

their operation (as described above in Sections IV.C.2.e.(2) and IV.C.2.e.(3)) and prepare a proposed alternative program plan including the results of the analysis; the proposed method for implementing new technologies and practices, including an approach for monitoring performance; and the results demonstrating that these technologies and practices perform equivalent to or better than the baseline effluent guidelines. This plan must be included with the CAFO's NPDES permit application or renewal, and it will be incorporated into the permit upon approval by the permitting authority.

CAFOs are expected to derive substantial benefits from participation in the alternative standards approach, through greater flexibility in operation, increased good will of neighbors, reduced odor emissions, and potentially lower costs. EPA is considering future opportunities for other possible incentives to encourage participation in this program.

f. *How did EPA consider the Clean Water Act statutory factors in establishing the ELGs?* (1) BPT. In establishing BPT effluent guidelines for an industry category, EPA looks at a number of factors in determining the appropriate effluent limits for conventional, toxic, and non-conventional pollutants. EPA first considers the cost of achieving effluent reductions in relation to the effluent reduction benefits. The Agency also considers the age of the equipment and facilities, the processes employed and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the Agency deems appropriate. 33 U.S.C. 304(b)(1)(B). Traditionally, EPA establishes BPT effluent limitations based on the average of the best performances of facilities within the industry of various ages, sizes, processes or other common characteristics. EPA's consideration of these factors and how they affected this rulemaking is presented in the *Technical Development Document*.

One way that EPA takes these factors into account is by breaking down categories of industries into separate classes of similar characteristics. The division of a point source category into groups called "subcategories" provides a mechanism for addressing variations among products, raw materials, processes, and other parameters that can result in distinct effluent characteristics. This provides each subcategory with a uniform set of ELGs that take into account technology achievability and